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May 16, 2012

Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: Notice of Oral Ex Parte Presentation
WT Docket No. 11-49

Dear Ms. Dortch:

On May 15, 2012, Elizabeth Bowles, President of the Wireless Internet Service Providers Association ("WISPA"), Richard Harnish, Executive Director of WISPA, Jack Unger, FCC Committee Chair for WISPA, Forbes Mercy, Legislative Committee Chair for WISPA, and the undersigned, as counsel to WISPA, met with Renee Wentzel, Legal Advisor to Chairman Julius Genachowski to discuss issues related to the above-referenced matter.

The WISPA participants presented the attached document explaining that (a) the test procedures employed by Progeny LMS, LLC ("Progeny") were flawed, (b) Progeny did not cooperate with the WISP industry in designing and conducting its test, and (c) as a result, Progeny could not support its claim that operation of its network would not cause unacceptable levels of interference to Part 15 outdoor devices. Based on WISPA's "significant interference concerns," WISPA reiterated its request that the Commission require Progeny to engage with WISP in cooperative testing to determine whether and to what extent operation of Progeny's network would result in unacceptable levels of interference.

Pursuant to Section 1.1206 of the Commission's Rules, this notice is being filed via ECFS in the above-referenced proceeding. Please direct any questions regarding this notice to the undersigned.

Respectfully submitted,

/s/ Stephen E. Coran
Stephen E. Coran

Enclosure

cc: Renee Wentzel
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Progeny LMS, LLC: The Case for 900 MHz Cooperative Testing

May 15, 2012

Overview

- WISPs deliver broadband to homes, schools, and small businesses, by relying on effectively sharing the license-free bands including sharing between users in the 902-928 MHz band.
- The FCC conditioned the grant of Progeny's 900 MHz M-LMS license on Progeny's ability to demonstrate through actual field tests that its system would not cause unacceptable levels of interference to 900 MHz Part 15 devices.
- Progeny claims that its network would not cause unacceptable levels of interference to Part 15 outdoor devices.
- Based on its flawed testing, Progeny has asked the FCC for final approval to deploy its network of licensed, outdoor base station transmitters.

Status

- The Wireless Bureau and OET appear poised to overlook the inadequate Progeny testing process as well as Progeny's faulty and unsupported test conclusions.
- After first requiring Progeny to engage in cooperative testing, the Wireless Bureau and OET now appear to be disinclined to require cooperative testing with the WISP industry.
- **"Significant interference concerns"** remain.
- Cooperative testing **with the WISP industry** would demonstrate conclusively whether Progeny's proposed network would put millions of deployed Part 15 outdoor devices at risk.

Testing A Non-Representative Sample

- Progeny tested only one make, one model and one pair of WISP equipment (Canopy). One model is not a valid representative sample.

Testing at Reduced Throughput

- Progeny failed to test at full throughput.
  - The signature symptom of interference is reduced throughput.
  - The 3.3 Mbps raw data rate Canopy system should deliver at least 2.3 Mbps of actual data throughput.
  - Progeny tested throughput only at the reduced rates of 500 kbps (22% of capacity), 750 kbps (33% of capacity) and 1 Mbps (43% of capacity).
  - Testing only at reduced data rates masks the throughput-reducing effects of interference caused by the Progeny network.
  - Progeny's test conditions mask the effects of the interference caused by its network.

Testing Exclusively at Short Link Distances

- Progeny failed to test at "real world" link distances typical of WISP deployments.
  - WISPs commonly serve customers located 10, 15 and 20 miles from their access point towers.
  - Canopy has an effective range of up to 40 miles.
  - Progeny tested the Canopy equipment at a link distance of only 0.4 miles (1/100 the rated maximum link distance).
- Progeny's testing of Canopy exclusively at short link distances skews the test results in Progeny's favor.
  - Short-distance testing results in an uncharacteristically high Canopy signal-to-noise ratio (SNR) thereby masking Progeny's throughput-reducing interference effects.

Testing Only in One Direction

- Progeny tested the Canopy link in only one direction, and did not test throughput from the base station to the CPE.
- Failing to test throughput in both directions forecloses the ability to detect reverse-direction interference.

Non-Representative Test Setting

- Progeny's Santa Clara Valley test location is not representative of the "urban canyon" areas where Progeny's network of WAPS base station transmitters will need to be deployed in greater numbers.
- The Santa Clara Valley low building heights, low tree density and tree heights, flat valley floor and high surrounding mountains require only a minimum number of Progeny high-level base station transmitters.
- Progeny did not address its need for a greater number and density of base station transmitters and the increased "noise" and interference that these transmitters will cause to Part 15 equipment in outdoor, "real-world" urban deployment settings.

Failure to Cooperate

- FCC policies required Progeny to cooperate
  - Progeny apparently contacted Itron (automated meter reading company), but never contacted WISPA or WISPs.
  - Progeny's test process flaws could have been avoided.
  - Progeny made no claims of ever publicizing its testing process or soliciting any public input; however, after the test was complete, Progeny then claimed that it never received any interference complaints during its testing.

Failure to Demonstrate Non-Interference

- The flawed testing and the failure to engage in cooperative testing produced defective test conclusions that substantially mask the potential for significant levels of interference to Part 15 outdoor equipment.
- Progeny's "lack of significant interference" claims remain unproven with respect to Part 15 outdoor devices.
- **"Significant interference concerns"** remain.

Suggested Remedy

Before authorizing commercial deployment of Progeny's network, the FCC should require Progeny to engage with WISPA in cooperative testing to determine whether real-world operation of Progeny's network will result in unacceptable levels of interference to Part 15 outdoor broadband devices.